QR series

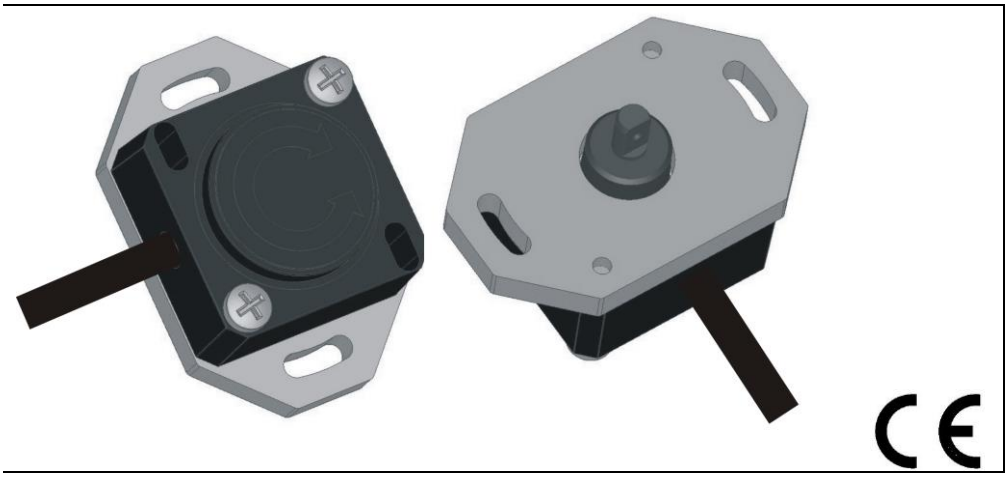
QR46-120HB-I-P0,1CS3p

Absolute rotary encoder (contactless)

Output
4 - 20 mA

Supply voltage
10 - 32 Vdc

Measuring range
120° (±60°)



	General specifications 12976, v20220829
Housing	Q46: PBT black with metal plate
Dimensions (indicative)	40.5x63x28 mm, shaft excluded.
Mounting	Mounting holes in bracket for 2x M4 (screws not included)
Ingress Protection (IEC 60529)	IP66
Relative Humidity	0 - 95% (non condensing, fully potted)
Weight	approx 70 gr (cable excluded)
Shaft	Stainless steel Ø 6 mm
Shaft type	D-type 4,6mm with Ø2mm hole (optional lever compatible with Elobau lever)
Shaft bearing	Polyamide (glass-filled), Radial force < 1Nm, Axial force < 8N (push & pull)
Shaft length	13,65 mm w.r.t. mounting surface
Supply voltage	10 - 32 Vdc
Polarity protection	Yes
Current consumption	≤ 25 mA
Operating temperature	-25 to 80°C
Storage temperature	-25 to 85°C
Measuring range	120° (±60°)
Programmable center position	No, use slot holes to adjust 0° point during mounting
Accuracy	
Resolution	12 bit over 360° (min. step 0,09°)
Sensitivity error	±0.5% typ. (@20°C), ±1% typ. (full Temp. range)
Offset error	± 7°
Non linearity	< ± 1°
Repeatability	0,13°
Response time	< 4 ms
Max speed	15 rpm
Output signal	4 - 20 mA
Short circuit protection	Yes (T<55°C), Max 10 s (T>55°C)
Output load resistor	Rload ≤ 50*Vs - 300 [Ω]
Connection (length ±10%)	Pigtail cable: 0,1 m TPE/PP Li9y12y, black ø5,2 mm, wires: 3x0,5 mm², connector AMP superseal 1.5 series 3-pole Cap housing (=male) (p/n 282105-1) Tab contacts (p/n 183036-1) with wire seals (p/n 281934-4) and rubber boot (p/n 880811-2)
Wire coding	Pin 1: (Black1) Gnd Pin 2: (Black2) Supply Voltage Pin 3: (Black3) Output  Frontview

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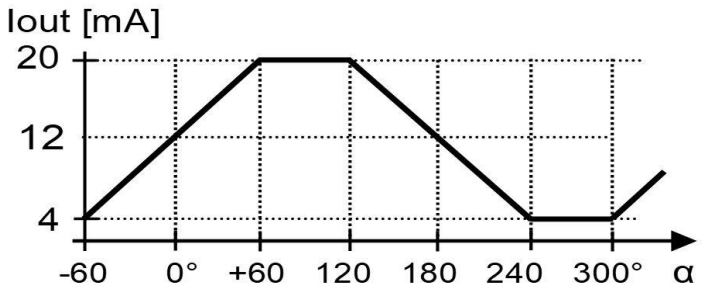
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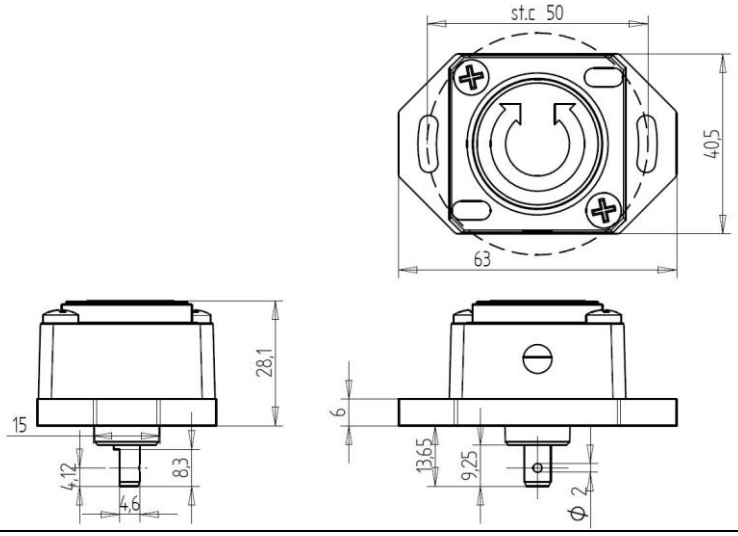
CCW from 0°: output decreases

CW from 0°: output increases

Transfer characteristic



Dimensions (indicative only)



Optional accessoires

Optional lever:
Order code DIS: 15050





Optional lever fixing ring:
Order code DIS: 15101
(not required for proper mounting of lever)



Product Picture



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